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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,223	09/07/2005	Johannes Hermanus Potgieter	SPOF-0003	7209
23377	7590	10/05/2006	EXAMINER	
WOODCOCK WASHBURN LLP ONE LIBERTY PLACE, 46TH FLOOR 1650 MARKET STREET PHILADELPHIA, PA 19103			SUGLO, JANET L	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/521,223

Applicant(s)

POTGIETER ET AL.

Examiner

Janet Suglo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A process is statutory if it requires physical acts to be performed outside the computer independent of and following the steps to be performed by a programmed computer, where those acts involve the manipulation of tangible physical objects and result in the object having a different physical attribute or structure (see MPEP 2106). A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. Referring to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" in determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the *final* result achieved by the claimed invention is "useful, tangible and concrete."

(<<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>>)

Claim 1 is written as a system, however all the limitations are directed towards modules inside a processor, and is therefore treated as a method. The claimed method detects when fuel has been stolen. A process is performed, but no result is

subsequently output or used in any manner. No information is presented to a user nor does a physical transformation occur outside the computer as a result. The claims do not produce a concrete, tangible and useful result. Therefore the subject matter claimed is considered non-statutory.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-4 and 6-11** are rejected under 35 U.S.C. 102(b) as being anticipated by Frankland (GB 2,338,308).

With respect to **claims 1 and 8**, Frankland teaches a fuel theft detection system for detecting when fuel has been stolen from a vehicle's fuel tank (page 1, lines 12-13), the detection system comprising:

input means that is connectable to a vehicle's fuel level sensor for providing an indication of the fuel level in the vehicle's fuel tank (page 13, lines 5-7);

controller connected to the input means (Figure 1: 5; page 3, lines 8-12; page 11, lines 25-29);

timing means for driving the controller to capture and record the fuel level at regular, pre determined intervals (page 5, lines 8-11);

storage means for storing the recorded data (page 7, line 26); and

wherein the controller is arranged to calculate the average fuel level over a first period of time (page 6, lines 6-9), and to then store the resulting average fuel level in the storage means for later analysis (page 6, lines 21-25; page 7, lines 1-2), so that any deviation in the fuel level in successive periods of time by more than a predetermined amount would suggest fuel theft (page 8, lines 20-22; page 11, lines 25-29), with the controller, after the fuel tank has been filled with fuel, also being arranged to determine the amount of fuel that has been dispensed into the fuel tank (page 10, lines 27-29) and to then enable a comparison to be made between the amount of fuel actually dispensed into the fuel tank and the amount of fuel alleged to have been dispensed into the fuel tank, with any discrepancy between these two values also suggesting fuel theft (page 10, lines 27-29).

With respect to **claims 2 and 9**, Frankland teaches a reference value defining means for defining a plurality of intermediate reference values between a truly full fuel tank and a truly empty fuel tank (page 11, lines 10-23).

With respect to **claims 3 and 10**, Frankland teaches the storage means includes reference value profiles for all existing fuel level sensors and fuel tanks, with the relevant reference value profile being selected when the system is installed into the vehicle (e.g., calibration) (page 11, lines 5-23).

With respect to **claim 4**, Frankland teaches the input means produces an analogue signal indicative of the fuel level, with the system further including an analogue to digital converter for converting the analogue signal into a digital signal, the

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resulting digital signal defining a primary input for the system (page 4, lines 7-12; page 13, lines 13-14).

With respect to **claim 6**, Frankland teaches the system is connected in series between a vehicle's ignition switch and the vehicle's fuel level sensor in the fuel tank (page 8, lines 14-17).

With respect to **claims 7 and 11**, Frankland teaches the storage means is fitted with a transmitter for transmitting the stored, recorded data to a remote receiver (page 7, line 26 – page 8, line 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Frankland (GB 2,338,308) in view of Tanguay (US PGPub 2002/0005669). Frankland teaches all the limitations of parent claim 1 as shown above and further teaches that the predetermined interval is approximately 10 seconds (page 5, line 8). Frankland does not specify whether the timing means is an oscillator. Tanguay teaches that oscillators can be used as the adjustable time base for various time keeping functions (Tanguay: [0004]). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frankland to include the oscillator of Tanguay

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because the use of oscillators is advantageous as they are repeatable and accurate (Tanguay: [0004]).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

McGarvey et al. (US Patent 5,319,545) teaches a system to monitor multiple fuel dispensers and fuel supply tank.

Dickson (US Patent 7,076,330) teaches a fraud detection through flow rate analysis.

Hartsell, Jr. (US Patent 6,381,514) teaches a dispenser system for preventing unauthorized fueling.

Regnaült et al. (US Patent 5,052,223) teaches an apparatus including a capacitive probe for measuring the level and/or volume of a liquid.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet Suglo whose telephone number is 571-272-8584. The examiner can normally be reached on weekdays from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Janet L Suglo
September 30, 2006


MARC S. HOFF
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